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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,708	11/24/2003	Madjid F. Nakhjiri	CE09292R	5371

22917 7590 11/01/2006

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,708

Applicant(s)

NAKHJIRI ET AL.

Examiner

Kristie Shingles

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-20,23-26 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-20,23-26 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Claims 1-16, 21, 22, 27 and 28 are cancelled.

Claims 17-20, 23-26 and 29-32 are pending.

Response to Arguments

1. In view of the Appeal Brief filed on 8/18/2006, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is a non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendment, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Applicant's arguments with respect to claims 17 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 17, 20, 21, 23-26, 29, 31 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Barna et al* (US 2002/0046277) in view of *Akgun et al* (US 2004/0029585).

a. **Per claim 17**, *Barna et al* teach a method for point-to-point protocol (PPP) link handoff comprising:

- receiving, by a target access router (AR), PPP context information from a source AR (page 4 paragraph 0035—target PDSN receives PPP context information from source PDSN);
- establishing, by the target AR, a PPP link between the target AR and a remote unit using the PPP context information (page 4 paragraphs 0034-0037—establishment of PPP link between target PDSN and mobile device using the PPP context information); and
- receiving traffic information via a tunnel between the source AR and the target AR (page 2 paragraphs 0015-0016 and 0034-0037—traffic information communicated between target and source PDSNs via a tunnel).

Barna et al fail to explicitly teach wherein in the beginning of a period of low remote unit data activity triggers establishing the PPP link. However *Akgun et al* teach establishing the PPP link between the wireless unit and the new wireless gateway when the wireless unit is dormant or idle (page 4 paragraph 0046). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Barna et al* with *Akgun et al* for the purpose of permitting the handoff and establishment of the new PPP link between the mobile unit and the target router to occur when the mobile unit is not in an active mode; because this prevents the loss of any data packets or calls made during the handoff. Establishing the new PPP link when the mobile device is in an idle, dormant or silent mode provides for a more efficient and seamless handoff process—idle and dormant handoffs are well-known techniques in the art.

b. **Claim 29** contains limitations that are substantially equivalent to claim 17 and is therefore rejected under the same basis.

c. **Per claim 20**, *Barna et al* with *Akgun et al* teach the method of claim 1, *Barna et al* further teach the method of claim 1, wherein conveying the PPP context information and conveying the traffic information occur concurrently (page 4 paragraphs 0035 and 0037, page 5 paragraphs 0040-0044; *Akgun et al*: page 6 paragraph 0071, 0073, 0079-0080).

d. **Per claims 23 and 24**, *Barna et al* with *Akgun et al* teach the method of claim 1, *Barna et al* further teach the method further comprising: determining when the tunnel between the source AR and the target AR will expire based on a tunnel lifetime; and extending the lifetime of the tunnel in order to convey the PPP context information (page 2 paragraphs 0015-0016, page 4 paragraphs 0034 and 0036-0037; *Akgun et al*: page 4 paragraph 0046, page 7 paragraph 0090).

e. **Per claim 25**, *Barna et al* with *Akgun et al* teach the method of claim 17, *Barna et al* further teach the method further comprising: establishing a network layer link between the target AR and the remote unit using the PPP link (page 2 paragraphs 0015-0016, page 4 paragraphs 0034-0036; *Akgun et al*: page 3 paragraph 0035, page 4 paragraph 0051).

f. **Per claim 26**, *Barna et al* with *Akgun et al* teach the method of claim 25 further comprising: tearing down the tunnel between the source AR and target AR after establishing the network, layer link (page 4 paragraph 0037; *Akgun et al*: page 4 paragraph 0046, page 7 paragraph 0090).

g. **Per claim 31**, *Barna et al* with *Akgun et al* teach the target AR of claim 29, *Barna et al* further teach wherein the target AR comprises a packet data serving node (PDSN) (page 3

paragraph 0027; *Akgun et al*: page 3 paragraph 0034, page 4 paragraph 0042, page 5 paragraph 0057).

h. **Per claim 32**, *Barna et al* with *Akgun et al* teach the target AR of claim 29, *Barna et al* further teach wherein the target AR comprises a GPRS gateway support node (GGSN) (page 3 paragraph 0027; *Akgun et al*: page 4 paragraphs 0041-0042 and 0048, page 5 paragraph 0057-0058).

5. **Claims 18, 19 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Barna et al* (US 2002/0046277) in view of *Akgun et al* (US 2004/0029585) in further view of *Lioy et al* (USPN 6,377,556).

a. **Per claim 18**, *Barna et al* with *Akgun et al* teach the method of claim 17 as indicated above, yet fail to explicitly teach the method of claim 17, further comprising negotiating, by the target AR with the remote unit, PPP parameters not received by the target AR from the source AR. However, *Lioy et al* disclose PPP configuration negotiation and renegotiation (col.4 line 66-col.6 line 39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Barna et al* and *Akgun et al* with *Lioy et al* for the purpose of the negotiating with the source AR to receive information needed to properly handle to the handoff and to successfully establish a channel for the handover.

b. **Per claim 19**, *Barna et al*, *Akgun et al* and *Lioy et al* teach the method of claim 18, *Lioy et al* further teach the method of claim 18, further comprising: determining that at least a portion of the PPP context information is not applicable to the target AR; and negotiating, by the target AR with the remote unit, PPP parameters corresponding to the PPP context information determined to not be applicable to the target AR (Abstract and col.4 line 66-col.6 line 65).

c. **Claim 30** is substantially similar to claim 18 and is therefore rejected under the same basis.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Choi et al (6,963,550), Julka et al (2004/0063431), Trossen et al (2003/0212764), Park (6,725,042), Hsu et al (7,110,377), Lim (6,404,754), Hwang et al (6,671,265), Kobylinski et al (7,043,243), Lind et al (6,163,694).

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER